

REMARKS

In response to the final Office Action, dated October 29, 2003, an RCE transmittal, with appropriate fee charge authorization, and the present Amendment are submitted. In addition, an Information Disclosure Statement is also presented for consideration. By the present Amendment, claims 1 and 2 are cancelled, leaving claims 3 through 15 as the only remaining pending claims. Claim 3 has been rewritten in independent form, and the dependencies of claims 5, 8, 13 and 15 have been changed to stem from claim 3. Favorable reconsideration of the application in light of the following comments is respectfully solicited.

All claims have been rejected on the same grounds, with the same explanation, as set forth in the Office Action dated July 31, 2003. In summary, the claim rejections are as follows: claims 1, 2, 5, 7, 13 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over De Filippis in view of Arnoux; claims 3 and 4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over De Filippis in view of Arnoux and Isaak; claims 6, 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over De Filippis in view of Arnoux and Eakman; claims 10 through 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over De Filippis in view of Arnoux and Fatula; and claim 14 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over De Filippis in view of Arnoux and Erdman.

Each of the rejections of record was traversed in the Amendment filed August 21, 2003. The remarks made in support of the traversals are again urged herein. Rather than reiterate the arguments in full, reference is made to the August 21 document. The present Office Action responds to the arguments with assertions understood to be as follows. A dynamoelectric machine can be used as a motor or a generator. Ferromagnetic core segments can be made

ferromagnetically isolated for the purpose of concentrating flux. References may be combined although none of them explicitly suggests combining one with another.

Without repeating here the various principles and legal decisions cited in the last Amendment, it is emphasized that it is well established precedent that whether or not the prior art *could* be modified so as to result in the combination defined by claims, the modification would not have been obvious unless the prior art suggested the desirability of the modification. Thus, the fact that a machine may be operable as a motor or alternatively as a generator, does not compel a conclusion that it would have been obvious to modify the motor of De Filippis to incorporate the stator pole configuration of the magnetic flywheel of Arnoux. Such conclusion of obviousness, of course, also cannot be compelled by the mere fact that neither reference explicitly suggests combining their teachings.

Rather, it is well settled that the test for supporting the ultimate legal conclusion of obviousness under 35 U.S.C. §103 is whether the applied prior art as a whole would have realistically impelled one having ordinary skill in the art, at the time the invention was made, to modify a reference in a specific manner to arrive at a specifically claimed invention. It is the examiner's burden to establish the conclusion of obviousness. Whether or not Arnoux and De Filippis "are classified in the same class and subclass" is irrelevant.

It is again submitted that the record does not provide bases in the prior art references for the modification of De Filippis proposed in the Office Action. Moreover, it is further submitted that the proposed modification would contradict the objectives described in each of the references. Consideration of both references by a person of ordinary skill in the art would have led away from such a modification as it would have destroyed the advantages sought by De Filippis. Case law holdings have well established the principle that, in ascertaining what would

or would not have been obvious to the artisan, the teachings of the application disclosure would not have been within the artisan's consideration.

The De Filippis disclosure is directed to "a permanent magnet brushless electric motor, particularly for direct drive of a member such as the cylinder of a washing machine, the motor comprising a rotor fixed for rotation with a shaft of the member to be driven and rotating with respect to a crown-like stator obtained by blanking a lamination stack provided with coil supporting teeth (column 1, line 67 - column 2, line 6). . . . "The construction of the motor has the aim of exploiting the iron of the lamination as much as possible (column 2, lines 51-53)." A person of ordinary skill in the art would have concluded that De Filippis intends to maximize the use of the lamination stack material and be able to provide the high starting torque required for operation of a washing machine or the like application.

The objective of Arnoux, as stated at column 2, line 19-22, is "to reduce the starting torque of a magnetic flywheel of the type described above for a hand-driven magneto megohmmeter with step variable voltage." A further objective (column 1, line 50) is to avoid having to turn the driving crank too fast. A person of ordinary skill in the art would have found these objectives to be at odds with the purposes of De Filippis; it simply would not have occurred to such person that De Filippis should be modified in light of the Arnoux disclosure. The fact that ferromagnetically isolated core segments may concentrate flux would not have been a factor in favor of modification of De Filippis, as such modification would split the stator crown into multiple segments that would require a major reconfiguration to provide the appropriate supporting structure for the precise positioning of the various segments. The artisan, if presented with such a possibility, would have led to question whether the transformer characteristics intended by De Filippis would be compromised.

By this Amendment, claim 3 is the only independent claim. Included in this claim is the requirement for a stator comprising a plurality of ferromagnetic core segments ferromagnetically isolated from each other, each of the core segments having respective coils wound thereon to form stator windings, and an inner volume that comprises a power supply, a controller and electronic switches responsive to the controller for applying energization current to the stator windings.

It is submitted that this claim is patentably distinguishable not only for the core segment structure requirements, as discussed above, but for the additional elements required for inclusion within the stator volume. Isaak has been relied upon for its disclosure of a fuel cell positioned within a hollow cylindrical stator of a homopolar electric motor. It is again submitted that a person of ordinary skill in the art, having considered the teachings of the three applied references would have found no suggestion to modify the De Filippis structure to include therein a fuel cell. Instead, the artisan would have found the Isaak provision of a fuel cell within the stator to be repugnant to the De Filippis disclosure, as the sheer bulk of the cell would interfere with the iron lamination.

With respect to the additional requirements of the remaining dependent claims, reference is made to the positions presented in the August 21 Amendment. Withdrawal of the rejections of record and allowance of the application are respectfully solicited. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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